REMARKS

The Office Action dated February 23, 2005 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claim 20 has been amended. No new matter has been added, and no new issues are raised which require further consideration and/or search. Claims 1-18 and 29-39 have been allowed. Claims 19-28 are submitted for consideration.

As a preliminary matter, the Office Action indicated that claim 21-25 and 27-28 contain allowable subject matter, and would be allowable if amended to be in independent form. Claims 21-25 and 27-28 depend on claim 19 and incorporate all of the elements of claim 19. In light of the arguments presented below, Applicant requests that this objection be withdrawn.

Claims 20 and 26 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claim 20 has been amended. Therefore, Applicants request that this rejection be withdrawn.

Claim 20 was objected to because of informalities. Claim 20 has been amended. Therefore, Applicants request that this objection be withdrawn.

Claims 19 and 20 were rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,487,170 to Chen et al. in view of U.S. Patent No. 6,421,348 to Gaudet

et al. The rejection is traversed as being based on references that neither teach nor suggest the novel combination of features clearly recited in independent claim 19.

Claim 19, upon which claims 20-28 depend, recites a network functions module. The network functions module includes at least one flow module and at least one memory in communication with the at least one flow module. The network functions module also includes a bridging and routing module in communication with the at least one flow module and the at least one memory. The bridging and routing module performs bridging of packets to a downstream flow module and routes the packets to and from a bus. The network functions module is configured to implement flow control and quality of service functions on packets in a network.

As will be discussed below, the cited prior art references of Chen et al. and Gaudet et al. fail to disclose or suggest the elements of claims 19 and 20.

Figure 3A of Chen et al., illustrates a network device which includes a plurality of interfaces, a forwarding engine, a local bandwidth broker, and a plurality of outgoing interfaces. Col. 5, lines 26-36. The incoming interfaces receive data and control packets and pass the received information to the forwarding engine or the local bandwidth broker for processing. Col. 5, lines 43-45. The forwarding engine includes a forwarding process for performing lookups based upon information in a packet's IP header and a packet scheduler for determining the appropriate PHB for received packers and for buffering the packets for transmission on the specified outgoing interface. Col. 6, lines 8-23. The local bandwidth broker is coupled to the forwarding engine and the outgoing interfaces

and may receive information retrieved from routing tables and/or the forwarding database from the forwarding engine for use in performing its admission control processing. The local bandwidth broker may also update link state information in the routing tables and/or the forwarding database and may receive various statistics from the outgoing interfaces. Col. 6, lines 41-62.

Gaudet et al teaches a switched network including a first data exchanger and a second data exchanger, each of which includes functional blocks that enable high speed routing of packet data. Col. 3, lines 36-40. The first data exchange is connected to second data exchanger over a switch bus. Each data exchanger includes a receive FIFO for providing temporary storage of frame data prior to send the data over the switch bus, a transmit FIFO for transmitting unicast frame data to ports and for moving data from an external buffer and a broadcast buffer. Col. 3, line 63-Col. 4, line 19.

Applicant submits that Chen et al. fails to disclose or suggest the claimed features in each of claims 19 and 20. Claim 19, in part, recites a bridging and routing module in communication with the at least one flow module and the at least one memory, the <u>bridging and routing module performs bridging of packets to a downstream flow module</u> and routes the packets to and from a bus. The Office Action states that Chen et al. teaches said at least one flow module (forwarding engine) in communication with at least one memory and that the bridging and routing module (local bandwidth brokers) bridges the packets to said flow module. According to Col. 6, lines 41-62 of Chen et al., the local bandwidth brokers (bridging and routing module) may receive information retrieved from

routing tables and/or the forwarding database from the forwarding engine (flow module) for use in performing its admission control processing, <u>may update link state information in the routing tables and/or the forwarding database</u> and may receive various statistics from the outgoing interfaces. There is simply no teaching or suggestion in Chen et al. of the bridging and routing module bridging the packet to the forwarding engine/flow module. Instead, Chen et al. teaches that the bridging/routing module forwards or bridges packets to the outgoing interfaces. Furthermore, claim 19 recites that the bridging and routing module performs bridging of packets to a downstream flow module, which is different from said at least one flow module. There is simply no teaching or suggestion in Chen et al. that the bridging and routing module performs bridging of packets to a downstream flow module as recited in claim 19.

Gaudet et al. does not cure the deficiencies of Chen et al. outlined above. Specifically, Gaudet et al. does not teach or suggest that the bridging and routing module performs bridging of packets to a downstream flow module as recited in claim 19. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §103(a) should be withdrawn because neither Chen et al. nor Gaudet et al, whether taken singly or combined, teaches or suggest each feature of claim 19 and hence, dependent claim 20 thereon.
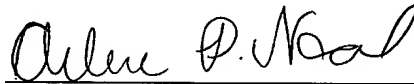
As noted previously, claims 19 and 20 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is

therefore respectfully requested that all of claims 1-39 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

Arlene P. Neal
Registration No. 43,828

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802